WHAT WE CLAIM IS:

1. A fuel rail comprising:

an elongated member having a longitudinal axis extending therethrough, the elongated member including:

a continuous outer surface surrounding a continuous inner surface, the continuous inner surface cincturing the longitudinal axis and defining an interior volume, the continuous inner surface being exposed to the interior volume and having an uniform composition with at least one undulation disposed about the longitudinal axis.

2. The fuel rail of claim 1, wherein the continuous outer surface and the continuous inner surface are separated at a uniform distance as the outer surface and the continuous inner surface traverse about the longitudinal axis.

3. The fuel rail of claim 1, wherein the continuous outer surface and the continuous inner surface are separated at a non-uniform distance as the continuous outer surface and the continuous inner surface traverse about the longitudinal axis

4. The fuel rail of claim 1, wherein the surface contains a first portion and a second portion, the undulation being disposed in the first portion and the first portion is contiguous to the second portion.

5. The fuel rail of claim 4, wherein the at least one undulation comprises a series of undulations disposed on the first portion of the elongated member.

6. The fuel rail of claim 4, wherein the second portion comprises at least one planar surface section being parallel to the at least one undulation.

7. The fuel rail of claim 4, wherein the second portion comprises three planar surfaces contiguous to each other.

8. The fuel rail of claim 4, wherein the second portion comprises two planar surfaces contiguous to each other.

9. The fuel rail according to claim 4, wherein the second portion comprises a predetermined proportion of the elongated member, the second portion being disposed about the longitudinal axis at a constant distance.

10. The fuel rail of claim 4, wherein the first portion comprises at least three points defining a virtual plane, the at least one undulation including the uniform composition that intersects the virtual plane at a plurality of positions on the virtual plane of the first portion.

11. The fuel rail according to claim 4, wherein a cross-section of the second portion contiguous to the first portion define a close ended two dimensional shape of at least two sides that touch only at their end points.

12. The fuel rail according to claim 9, wherein the at least one undulation comprises obliquely stacked surfaces of a uniform composition that form a corrugated surface across the virtual plane.

13. The fuel rail according to claim 9, wherein the at least one undulation comprises a plurality of planar surfaces of uniform composition oblique to the virtual plane and each planar surface of the plurality of planar surfaces is oblique to adjacent planar surfaces.

14. The fuel rail according to claim 13, wherein the plurality of planar surfaces comprises a series of planar surfaces adjacent to one another such that every planar surface is parallel to every other planar surface in the series of planar surfaces.

15. The fuel rail according to claim 1, wherein the at least one undulation comprises a series of curved surfaces such that a cross section of the series of curved surfaces describes at least one curve approximating at least one function y= a*cos*x and y= a*sin*x as plotted over a coordinate plane where y is the amplitude of curve, x is a predefined interval and a is any real number.

16. A method of damping pressure pulsations in a fuel injection system having a pressurized fuel source coupled to at least one fuel injector with a fuel rail establishing fluid communication between the pressurized fuel source and the at least one fuel injector, the fuel rail extending along a longitudinal axis, the method comprising:

providing an elongated member that extends along the longitudinal axis, the elongated member having a continuous inner surface and a continuous outer surface of an uniform composition cincturing the longitudinal axis, the continuous inner surface defining a first predetermined internal volume of a first configuration of the fuel rail; and

corrugating a first portion of the elongated member so as to define a second predetermined internal volume of a second configuration of the fuel rail.

17. The method of claim 16, wherein the corrugating comprises corrugating a predetermined proportion of the continuous outer surface of the elongated member with a series of undulations.

18. The method of claim 16, wherein the corrugating comprises corrugating a plurality of elongated members, each elongated member of the plurality of elongated members having at least one of a different internal volume and a different cross-sectional shape so as to optimize a damping of pressure pulsations in the fuel injection system.

19. The method of claim 16, wherein the second configuration includes an elongated tubular member having an internal volume of about 50 percent to about 75 percent of the first configuration.

20. The method of claim 17, wherein the second configuration includes the uniform composition having a curvilinear surface exposed to the longitudinal axis with a constant radius of curvature with respect to the longitudinal axis.

21. The method of claim 17, wherein the first configuration includes a tube having a rectangular cross section.